



FIG. 1A

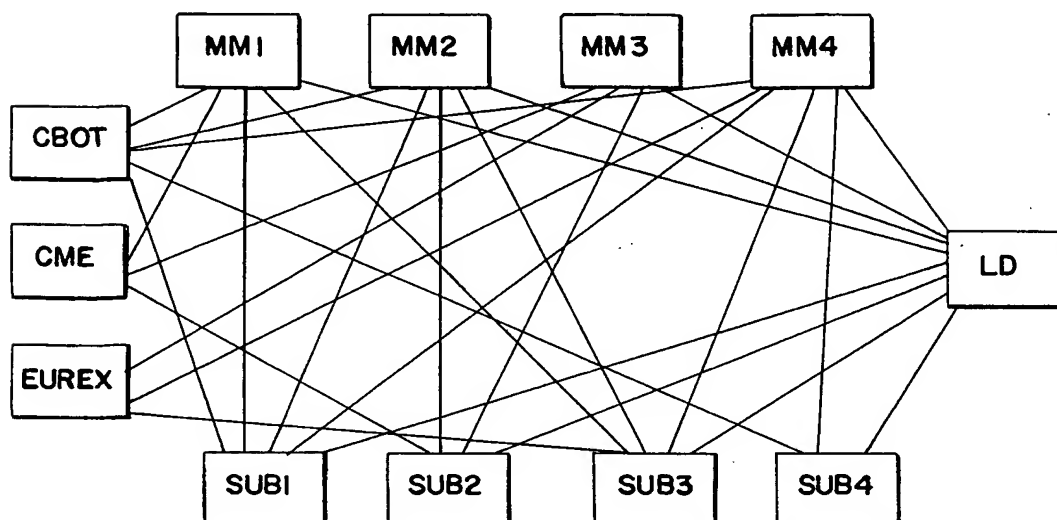


FIG. 1B

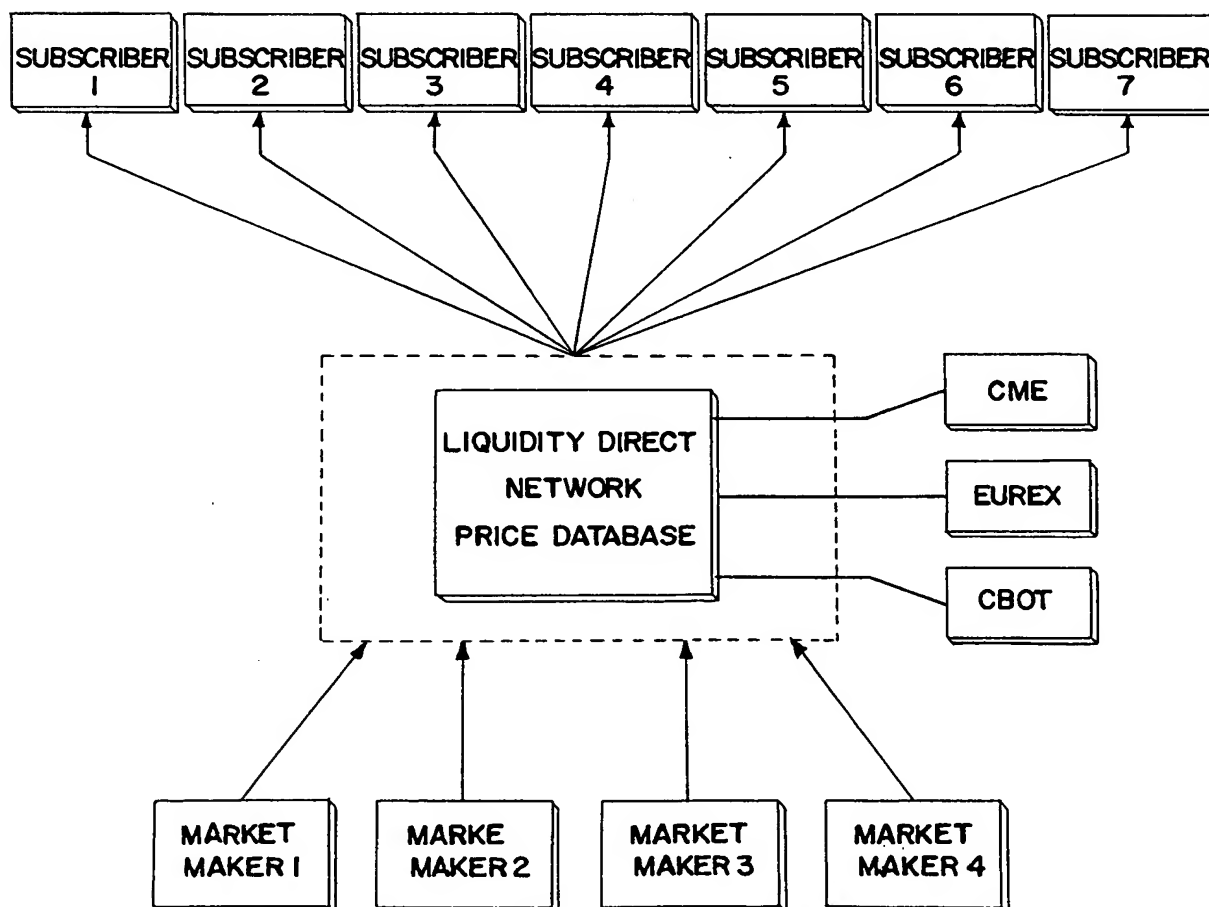


FIG. 2A

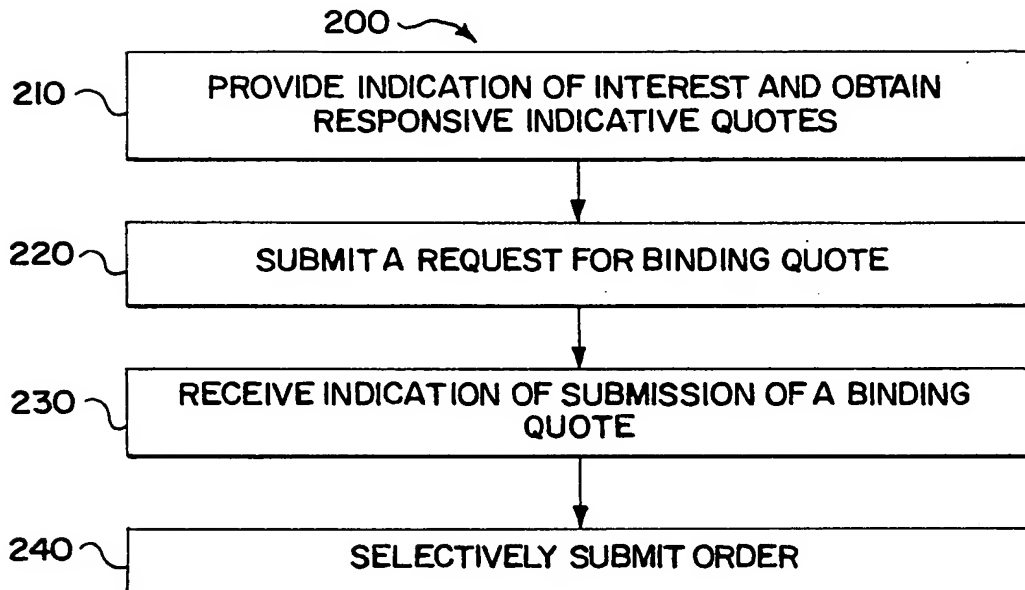


FIG. 2B

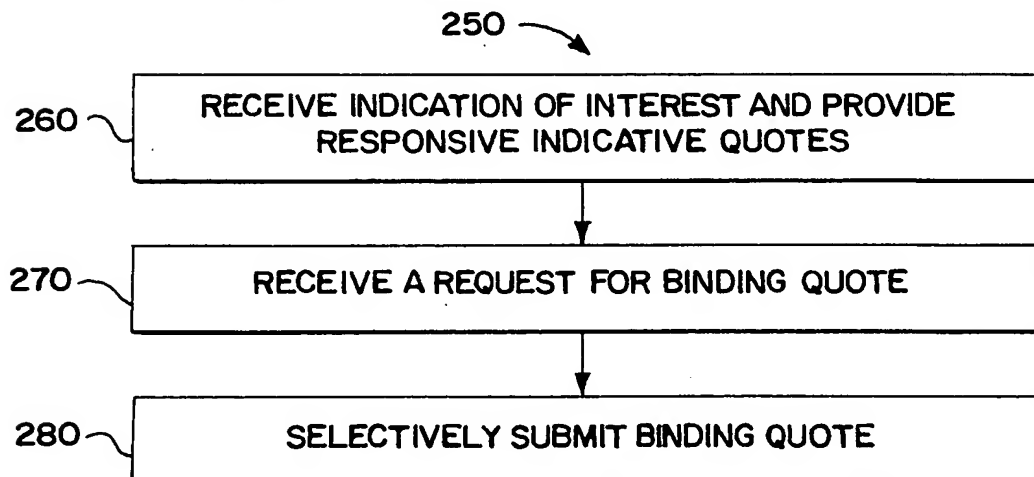


FIG. 3A

L

LD e-RFQ-TESTTRD02-SIMULATION

FILE TOOLS VIEW HELP

CUSTOMER ACCTS

PREFERENCES

ORDER

QUANTITY

PRICE

30 YEAR

30 YR SPREADS

10 YEAR

10 YR SPREADS

5 YEAR

5 YR SPREADS

FUTURE LEVELS

SPREADS

OUTRIGHTS

MORE OUTRIGHTS

CONTRACT	BID	BEST IND. BID	BEST IND. ASK	ASK	LAST
30YR TREASURY DEC03 FUTURE	226@107.03			342@107.04	114@107.04
e-RFQ 30YR TREASURY DEC03 106 CALL		250@2.46	250@2.50		
e-RFQ 30YR TREASURY DEC03 106 STRADDLE		450@0.54	450@0.58		
e-RFQ 30YR TREASURY DEC03 107 CALL		375@1.41	375@1.44		
e-RFQ 30YR TREASURY DEC03 107 STRADDLE		400@1.12	275@1.14		
e-RFQ 30YR TREASURY DEC03 108 CALL		500@2.08	500@2.11		
e-RFQ 30YR TREASURY DEC03 108-110 CALL SPREAD		200@3.53	200@3.55		
e-RFQ 30YR TREASURY DEC03 109 CALL		200@3.62	200@4.01		
e-RFQ 30YR TREASURY DEC03 111 STRADDLE		200@4.17	200@4.19		
e-RFQ 30YR TREASURY DEC03 110 CALL		200@4.50	200@4.52		

CROSS REQUEST

CONTRACT

BID

BEST IND. BID

BEST IND. ASK

ASK

LAST

e-RFQ HISTORY

e-RFQ BUTTON

BINDING BIDS IN e-CBOT BOOK

LIQUIDITY DIRECT INDICATIVE BID

LIQUIDITY DIRECT INDICATIVE ASK

BINDING OFFERS IN e-CBOT BOOK

TRADE HISTORY

NUM

READY

CONTRACT SELECTION

CONTRACT SELECTION		X	
SHOW ALL CONTRACTS		30-YEAR	
CONTRACT	CONTRACT LIST	TAB LIST	
<div style="border: 1px solid black; padding: 2px;">30YR TREASURY-ZB</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY OPTION-OZB</div> <div style="border: 1px solid black; padding: 2px;">10YR TREASURY-ZN</div> <div style="border: 1px solid black; padding: 2px;">10YR TREASURY OPTION-OZN</div>	<div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 99 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 100 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 101 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 102 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 103 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 104 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 105 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 106 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 107 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 108 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 109 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 110 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 111 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 112 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 113 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 114 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 115 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 116 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 117 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 118 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 119 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 120 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 121 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 122 CALL</div> <div style="border: 1px solid black; padding: 2px;">30YR TREASURY-JAN04 123 CALL</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">ADD</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-left: 10px;">REMOVE</div>	
MONTH	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>		
CONTRACT TYPE	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>		
OPTION TYPE	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>		

30YR TREASURY-DECO3 107 CALL

30YR TREASURY-DECO3 108 CALL

30YR TREASURY-DECO3 109 CALL

30YR TREASURY-DECO3 110 CALL

30YR TREASURY-DECO3 111 CALL

30YR TREASURY-DECO3 109 STRADDLE

30YR TREASURY-DECO3 110 STRADDLE

30YR TREASURY-DECO3 111 STRADDLE

30YR TREASURY-DECO3 112 STRADDLE

UP

DOWN

CLEAR TAB LIST

SAVE

CANCEL

FIG. 3C

L SUBSCRIBER-RFQ-OZFNIC1045						X	
RFQ							
SYMBOL	CBT BID	LD BID	LD ASK	CBT ASK	LAST	CHANGE	
OZFNIC1045		0.03 4.58%	0.04 4.90%				
	800		800				
O BUY				O SELL O BUY\SELL			
100	50	25	QTY 100	+25	+50	+100	
SEND				CLOSE			

FIG. 3D

SELL 30YR TREASURY-DECO3 I08 CALL-11/03/2003 04:37:13 PM								- X	
CONTRACT	BID	BEST IND. BID	BEST IND. ASK	ASK	LAST				
30YR TREASURY DECO3 I08 CALL	350@2.08	500@2.08	500@2.11	350@2.11					
QUANTITY		PRICE		ORDER TYPE ACCOUNT					
50 100 200		2.08		LIMIT		97406			
350		LOAD BID		LOAD ASK					
500 1000 2000									
BUY/SELL				EXECUTE SELL		CLOSE			

FIG. 3E

SELL 30YR TREASURY-DECO3 I11 STRADDLE-11/03/2003 04:27:23								- X	
CONTRACT	BID	BEST IND. BID	BEST IND. ASK	ASK	LAST				
30YR TREASURY DECO3 I11 STRADDLE	450@4.17	450@4.17	450@4.17	450@4.17					
QUANTITY		PRICE		ORDER TYPE ACCOUNT					
50 100 200		4.19		LIMIT		97406			
450		LOAD BID		LOAD ASK					
500 1000 2000									
BUY/SELL				EXECUTE SELL		CLOSE			

L SHEETS-NEALTRD

OPTION

FUTURE

PUT SLOPE(%)

CALL SLOPE(%)

STRIKE

PRICE

PUT 1

PUT 2

ATM VAL

FUTURES:

DATE:

DAYS LEFT:

INTEREST RATE:

DISPLAY QUANTITY

MIN: MAX:

MAX DELTA:

MAX VEGA:

BID/ASK SPREAD

NARROW:

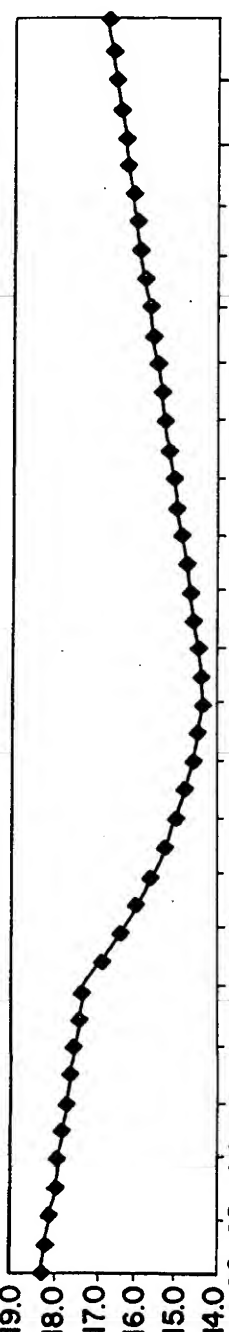
WIDE:

DATE: FUTURE BID: FUTURE ASK:

☒ NARROW ☐ WIDE

CALCULATE

RESET GRAPH SCALE



The graph shows a call option price curve starting at a strike of 90 and ending at 134. The price starts at approximately 18.0 and decreases to approximately 14.0. The curve is smooth and downward-sloping.

MIN STRIKE	90.00	MAX STRIKE	134.00	MIN VOL	14.00	MAX VOL	19.00
STRIKE	102.00	103.00	104.00	105.00	106.00	107.00	108.00
FITTED VOL	16.35%	15.95%	15.59%	15.27%	14.99%	14.76%	14.58%
MANUAL VOL							
CALL-ASK	5.23	4.33	3.48	3.02	2.26	1.55	1.25
FV	5.201	4.310	3.453	2.638	2.232	1.521	1.227
BID	5.18	4.28	3.43	2.61	2.21	1.50	1.20
QTY	125	125	150	150	175	200	250
PUT-ASK	0.33	0.44	0.58	1.12	1.36	2.01	2.35
FV	0.304	0.412	0.554	1.099	1.333	1.621	2.326
BID	0.28	0.39	0.53	1.07	1.31	1.60	2.30
QTY	500	475	375	300	250	200	175

PROFILE NAME:

FUTURE PRICE RANGE HIGH LOW

VOLATILITY RANGE HIGH LOW INCREMENT

SAVE PROFILE

CREATE SHEETS

EXIT

PUBLISH

CLOSE

FIG.4A

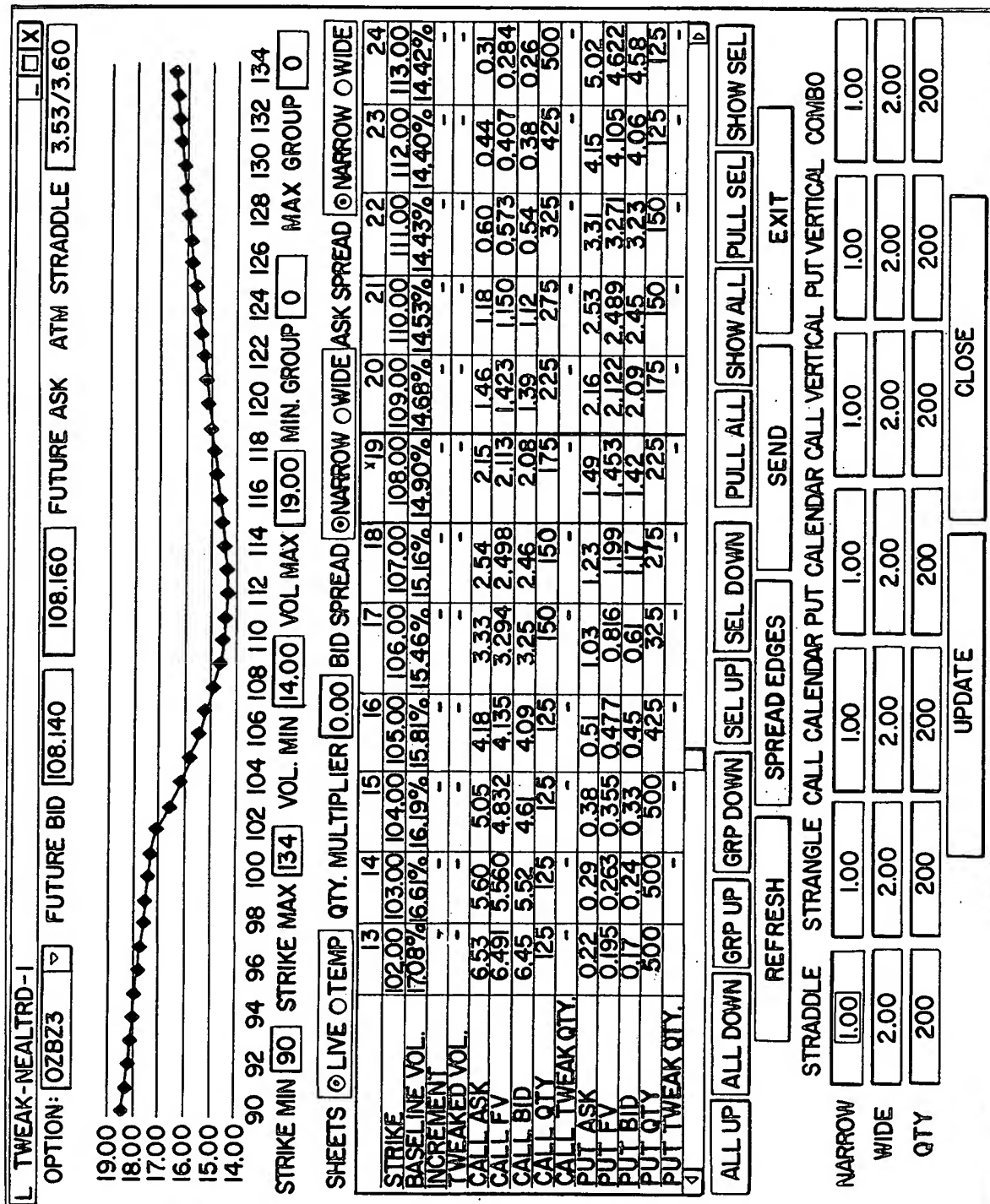


FIG. 4C

L E-FUTURE - PAT

FUTURE

ZNZI

0.0

CALCULATE BID

CALCULATE ASK

CALCULATE ASK

A/C/E BID

A/C/E ASK

105.210

105.210

105.210

106.315

107.000

FUTURE

ZNUJ

0.0

CALCULATE BID

CALCULATE ASK

CALCULATE ASK

A/C/E BID

A/C/E ASK

105.210

105.210

105.210

104.295

104.300

REFRESH BID AND ASK

READY

FIG. 5B

505 501 503 504 502 505

QUOTE-30YR TREASURY-DECO3108CALL-11/03/2003 03:56:11PM

CONTRACT	BID	OWN IND.	BID	BEST IND.	BID	ASK	OWN IND.	ASK	LAST
30YR TREASURY DECO3108CALL	350 @ 2.08		500 @ 2.08	500 @ 2.11	500 @ 2.11	350 @ 2.11			

506 509 510 507 508

ACCOUNT 97046
 ORDER TYPE LIMIT
 ACT MI

☒ BID ☐ WIDEN ☐ TIGHTEN ☒ ASK

PRICE 2.08 QTY 350

UP DOWN

PRICE 2.11 QTY 350

SEND CLOSE

QTY. INCREMENT
☒ 50
☐ 100
☐ 250

FIG. 5C

QUOTE-30YR TREASURY-DECO3111STRADDLE-11/03/2003 03:56:11PM

CONTRACT	BID	OWN IND.	BID	BEST IND.	BID	ASK	OWN IND.	ASK	LAST
30YR TREASURY DECO3111STRADDLE	200 @ 4.17		200 @ 4.17	200 @ 4.17	200 @ 4.19	200 @ 4.19			

ACCOUNT 97046
 ORDER TYPE LIMIT
 ACT MI

☒ BID ☐ WIDEN ☐ TIGHTEN ☒ ASK

PRICE 4.17 QTY 200

UP DOWN

PRICE 4.19 QTY 200

SEND CLOSE

QTY. INCREMENT
☒ 50
☐ 100
☐ 250

FIG. 6A

L LDE-RFQ-TESTTRD02-SIMULATION												-X	
FILE TOOLS VIEW HELP													
CUSTOMER ACCTS PREFERENCES ORDER OVERVIEW CONTRACT SELECTION													
LIST1	LIST2	LIST3	LIST4	LIST5	LIST6	LIST7	LIST8	LIST9	LIST10				
CONTRACT			BID		BEST IND. BID	BEST IND. ASK		ASK	LAST				
30YR TREASURY DECO3 FUTURE			226 @ 107.03					342 @ 107.04	114 @ 107.04				
e-RFQ 30YR TREASURY DECO3 106 CALL					250 @ 2.46	250 @ 2.50							
e-RFQ 30YR TREASURY DECO3 106 STRADDLE					450 @ 0.54	450 @ 0.58							
e-RFQ 30YR TREASURY DECO3 107 CALL					375 @ 1.39	375 @ 1.44							
e-RFQ 30YR TREASURY DECO3 107 STRADDLE					400 @ 1.12	275 @ 1.15							
e-RFQ 30YR TREASURY DECO3 108 CALL					500 @ 2.08	500 @ 2.11							
e-RFQ 30YR TREASURY DECO3 108-110 CALL SPREAD					200 @ 3.51	200 @ 3.55							
e-RFQ 30YR TREASURY DECO3 109 CALL					200 @ 3.60	200 @ 4.01							
e-RFQ 30YR TREASURY DECO3 109 STRADDLE					200 @ 4.17	200 @ 4.21							
e-RFQ 30YR TREASURY DECO3 110 CALL					200 @ 4.48	200 @ 4.52							
ORDER: BUY-30YR TREASURY-DECO3 108 CALL-7 EXECUTED, 0 WORKING, 0 CANCELLED - TIME: 11/03/2003 04:27:23PM													
CROSS REQUEST													
CONTRACT			BID		BEST IND. BID	BEST IND. ASK		ASK	LAST	e-RFQ HISTORY			
e-RFQ 30YR TREASURY DECO3 108 CALL			250 @ 2.09		500 @ 2.08	500 @ 2.11		243 @ 2.11	7 @ 2.11				
600 602													
READY													
TRADE HISTORY													

FIG. 6B

L LDe-RFQ-TESTTRD02-SIMULATION						FILE TOOLS VIEW HELP						604					
CUSTOMER ACCTS PREFERENCES ORDER OVERVIEW CONTRACT SELECTION																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LIST1	LIST2	LIST3	LIST4	LIST5	LIST6	LIST7	LIST8	LIST9	LIST10								
SELL 30YR TREASURY - DECO3 I08 CALL - 11/03/2003 04:37:13 PM <input type="checkbox"/> CONTRACT <input type="checkbox"/> LAST <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I06 CALL BID BEST IND. BID BEST IND. ASK ASK 350 @ 2.08 500 @ 2.08 500 @ 2.11 350 @ 2.11 <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I06 STRA PRICE ORDER TYPE ACCOUNT BUY/SELL QUANTITY 50 100 200 LIMIT 2.08 97406 EXECUTE SELL 350 LOAD BID LOAD BID CLOSE 500 1000 2000 <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I08 CALL SPREAD 200 @ 3.31 200 @ 3.33 <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I09 CALL 200 @ 3.60 200 @ 4.01 <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I09 STRADDLE 200 @ 4.17 200 @ 4.21 <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I10 CALL 200 @ 4.48 200 @ 4.48 602																	
ORDER: BUY-30YR TREASURY-DECO3 I08 CALL-7 EXECUTED, O WORKING, O CANCELLED-TIME: 11/03/2003 04:27:23 PM																	
CROSS REQUEST	e-RFQ HISTORY																
CONTRACT BID BEST IND. BID BEST IND. ASK ASK LAST <input checked="" type="checkbox"/> e-RFQ 30YR TREASURY DECO3 I08 CALL 250 @ 2.09 500 @ 2.08 500 @ 2.11 243 @ 2.11 7 @ 2.11																	
600																	
TRADE HISTORY																	
READY																	

FIG. 7

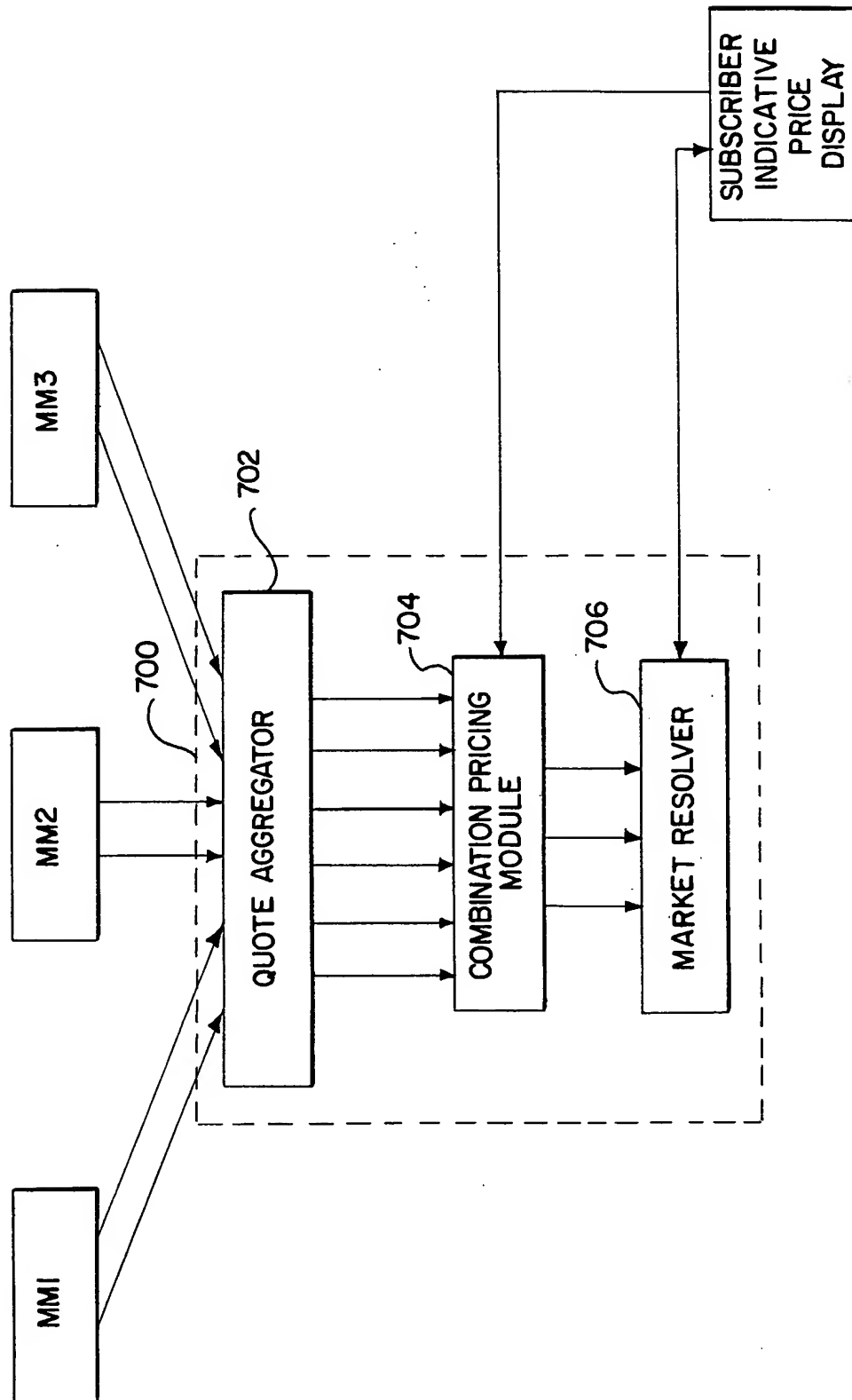



FIG. 8A

L MARKET MAKER 3.0-USERNAME-XYZ



10YR TREASURY-DEC03 ☐ -- EMPTY-- ☐
 10YR TREASURY-JAN03 ☐ -- EMPTY-- ☐
 10YR TREASURY-MAR03 ☐ -- EMPTY-- ☐
 30YR TREASURY-DEC03 ☐ -- EMPTY-- ☐
 --EMPTY-- ☐

10YR TREASURY DEC03

10YR TREASURY JAN04

10YR TREASURY MAR04

10YR TREASURY DEC03

EMPTY

EMPTY

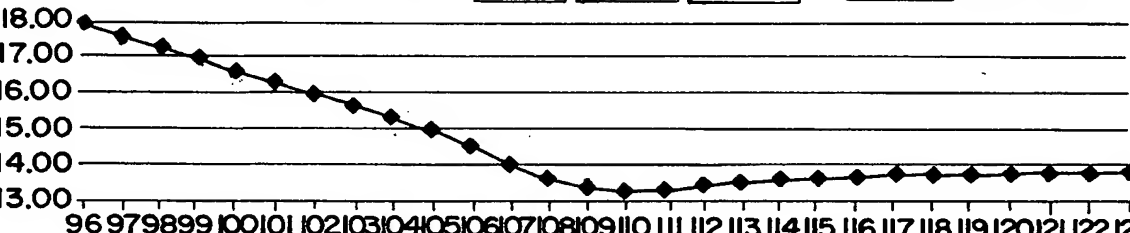
EMPTY

EMP

10YR TREASURY-DEC03
 FUTURE LEAD
 UNDERLYING

BID
 ASK
 MID

FUTURE SPREAD
 LAST UPDATE 10:32 AM 11/14/03



STRIKE MIN 96

STRIKE MAX 123

VOL MIN 13.00

VOL MAX 18.00

STRIKE	102	103	104	105	106	107	108	109	110	111	112	113
BASLINE VOL	15.96%	5.64%	5.34%	4.97%	4.54%	4.04%	3.60%	3.40%	3.30%	3.31%	3.43%	3.57%
INCREMENT	-	-	-	-	-	-	-	-	-	-	-	-
TWEAKED VOL	-	-	-	-	-	-	-	-	-	-	-	-
CALL ASK	5.61	5.02	4.08	3.18	2.33	1.53	1.16	0.52	0.32	0.20	0.12	0.07
CALL FV	5.588	4.811	4.060	3.162	2.307	1.506	1.138	0.502	0.307	0.179	0.101	0.055
CALL BID	5.56	4.61	4.04	3.14	2.28	1.48	1.12	0.48	0.29	0.16	0.09	0.04
CALL QTY	300	300	300	300	300	300	300	300	300	300	300	300
PUT ASK	0.08	0.12	0.19	0.29	0.43	0.63	1.27	1.63	2.44	3.31	4.23	5.19
PUT FV	0.060	0.103	0.171	0.273	0.417	0.616	1.248	1.611	2.416	3.288	4.210	5.163
PUT BID	0.04	0.09	0.15	0.26	0.40	0.60	1.23	1.59	2.39	3.26	4.19	5.14
PUT QTY	300	300	300	300	300	300	300	300	300	300	300	300

PUBLISHING

BID/ASK SPREAD

UP
 ALL SELECTION
 RESET
 ALL SELECTION

INCREMENT (%)
 SELECTION ALL

DOWN
 SELECTION ALL

PRICE VISIBILITY
 SHOW PULL
 ALL SELECTION SELECTION ALL

L SETSKEW-USERNAME-XYZ
[-] [X]

10 YR TREASURY-DECO3

SKEW

SPREAD PARAMETERS

SAVE SKEW

CANCEL

PUT SLOPE%

0.33%

STRIKE

103.00

PRICE

0.087

CALL SLOPE%

0.03%

CALL 1

108.00

CALL 2

110.00

CALL 3

113.00

INTEREST RATE: 1.30%

FUTURE

108.05

DATE: TUE 11/04/2003

DAYS LEFT: 10

DISPLAY QUANTITY

MIN: 300

MAX: 300

MAX DELTA: 100

MAX VEGA: 500

BID/ASK SPREAD

NARROW: 1

WIDE: 3

PUBLISH RANGE ☒ +/- ☐ TO

☒ NARROW ☐ WIDE

CALCULATE

MIN STRIKE: 95.00

MAX STRIKE: 123.00

MIN VOL: 12.00

MAX VOL: 19.00

AUTO FIX

STRIKE	103.00	104.00	105.00	106.00	107.00	108.00	109.00	110.00	111.00	112.00	113.00	114.00	115.00	116.00	117.00	118.00	119.00	120.00	121.00	122.00	123.00
FITTED VOL.	15.74%	15.46%	15.11%	14.70%	14.22%	13.68%	13.44%	13.31%	13.29%	13.37%	13.56%										
MANUAL VOL																					
CALL-ASK	5.20	4.26	3.35	2.48	2.02	1.26	0.60	0.38	0.23	0.14	0.08										
FV	5.185	4.246	3.336	2.466	2.006	1.249	0.585	0.364	0.216	0.123	0.069										
BID	5.17	4.23	3.32	2.45	1.63	1.23	0.57	0.35	0.20	0.11	0.05										
QTY	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
PUT-ASK	0.10	0.16	0.25	0.38	0.56	1.16	1.50	2.28	3.13	4.04	4.62										
FV	0.087	0.147	0.237	0.367	0.547	1.149	1.485	2.263	3.115	4.022	4.607										
BID	0.07	0.13	0.22	0.35	0.53	1.13	1.47	2.25	3.10	4.01	4.59										
QTY	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300

FIG.8B

L SET SKEW-USERNAME-XYZ

10 YR TREASURY - DEC03

SAVE SKEW

CANCEL

SKEW

SPREAD PARAMETERS

LOAD FROM...

CLEAR ALL

SAVE SPREAD PARAMETERS

CANCEL

	NARROW WIDE OFFSET SIZE			NARROW WIDE OFFSET SIZE						
	1	3	0.25	250	CLEAR	SPREAD TYPE 16	0	0	0	CLEAR
STRADDLE	1	3	0.25	250	CLEAR	SPREAD TYPE 17	0	0	0	CLEAR
STRANGLE	1	3	0.25	250	CLEAR	SPREAD TYPE 18	0	0	0	CLEAR
CALL VERTICAL	1	3	0.25	250	CLEAR	SPREAD TYPE 19	0	0	0	CLEAR
PUT VERTICAL	1	3	0.25	250	CLEAR	SPREAD TYPE 20	0	0	0	CLEAR
CALL CALENDAR	1	3	0.25	250	CLEAR	SPREAD TYPE 21	0	0	0	CLEAR
PUT CALENDAR	1	3	0.25	250	CLEAR	SPREAD TYPE 22	0	0	0	CLEAR
SPREAD TYPE 7	1	3	0.25	250	CLEAR	SPREAD TYPE 23	0	0	0	CLEAR
SPREAD TYPE 8	1	3	0.25	250	CLEAR	SPREAD TYPE 24	0	0	0	CLEAR
SPREAD TYPE 9	1	3	0.25	250	CLEAR	SPREAD TYPE 25	0	0	0	CLEAR
SPREAD TYPE 10	1	3	0.25	250	CLEAR	SPREAD TYPE 26	0	0	0	CLEAR
SPREAD TYPE 11	1	3	0.25	250	CLEAR	SPREAD TYPE 27	0	0	0	CLEAR
SPREAD TYPE 12	1	3	0.25	250	CLEAR	SPREAD TYPE 28	0	0	0	CLEAR
SPREAD TYPE 13	1	3	0.25	250	CLEAR	SPREAD TYPE 29	0	0	0	CLEAR
SPREAD TYPE 14	1	3	0.25	250	CLEAR	SPREAD TYPE 30	0	0	0	CLEAR
SPREAD TYPE 15	1	3	0.25	250	CLEAR					

FIG. 8C